

CLAIMS:

1. A web-processing roller, comprising at least one hollow space, characterized in that the hollow space is at least partially filled with a mixture (4) consisting of a liquid and at least one insoluble co-ingredient in the liquid, formed by solid particles, preferably a granular solid, or by another liquid.
2. The web-processing roller according to claim 1, characterized in that the mixture (4) exhibits a pulpy consistency.
3. The web-processing roller according to one of the proceeding claims, characterized in that the mixture (4) is under a pressure burden.
4. The web-processing roller according to one of the claims 1 and 2, characterized in that the mixture (4) is under a partial vacuum.
5. The web-processing roller according to one of the two proceeding claims, characterized in that a fluid conduit leads into the hollow space and the mixture (4) can be charged with the pressure burden or the partial vacuum via the fluid conduit.
6. The web-processing roller according to the proceeding claim, characterized in that at least one chamber (5; 7) which is variable in its volume is arranged in the hollow space.
7. The web-processing roller according to the proceeding claim, characterized in that the chamber (5; 7) comprises a flexible chamber wall (6; 10).
8. The web-processing roller according to the proceeding claim, characterized in that the chamber (5) is a bubble.
9. The web-processing roller according to one of the claims 6 and 7, characterized in that the chamber (7) comprises a moving chamber wall (9).

10. The web-processing roller according to the proceeding claim, characterized in that the chamber wall (9) is preferably mounted, such that it can move, by another chamber wall (8).
11. The web-processing roller according to one of the five proceeding claims, characterized in that the chamber (7) is formed by elastic bellows (10).
12. The web-processing roller according to one of the proceeding claims, characterized in that a rotational axis (R) of the roller (1, 2) extends through the mixture (4) in the centrally formed hollow space.
13. The web-processing roller according to one of the proceeding claims, characterized in that the hollow space is rotationally symmetrical with respect to the rotational axis (R) or is one hollow space of a number of hollow spaces which together form a rotationally symmetrical arrangement of hollow spaces.
14. The web-processing roller according to one of the proceeding claims, characterized in that the roller (1, 2) comprises a roller shell (1) which forms a container wall for the mixture (4).
15. The web-processing roller according to one of the proceeding claims, characterized in that the roller (1, 2) includes a roller shell (1) and a cylindrical body (12; 13; 15; 16) surrounded by the roller shell (1), and wherein the mixture (4) is arranged between the roller shell (1) and the cylindrical body (12; 13; 15; 16).
16. The web-processing roller according to one of the claims 1 to 14, characterized in that the roller (1, 2) includes a roller shell (1) and a cylindrical body (16) surrounded by the roller shell (1), and wherein the mixture (4) is arranged within the cylindrical body (16).
17. The web-processing roller according to one of the two proceeding claims, characterized in that the cylindrical body (12; 13; 15; 16) forms a container wall for the mixture (4).

18. The web-processing roller according to one of the preceding claims, characterized in that the roller comprises a roller shell (1) and a cylindrical body (16) surrounded by the roller shell (1), and wherein the mixture (4) is arranged between the roller shell (1) and the cylindrical body (16) and another mixture (4) of the claimed type is arranged within the cylindrical body (16).
19. The web-processing roller according to one of the four preceding claims, characterized in that the roller is a displacement-type roller and a displacement body forms the cylindrical body (13; 15; 16).
20. The web-processing roller according to one of the preceding claims, characterized in that at least one container (11) forming the hollow space is arranged in the roller (1, 2).
21. The web-processing roller according to one of the preceding claims, characterized in that at least one thermal treatment channel for conducting a heating or cooling fluid extends through a roller body (1) of the roller (1, 2) and ports at at least one axial end of the roller body (1), preferably at both axial ends.